

DERWENT-ACC-NO: 1989-091663

DERWENT-WEEK: 198912

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TITLE: Engobe for ceramic decorative bricks mfr. -  
contains enriched bentonite, and glass cullet contg.  
oxide(s) of silicon, titanium, calcium, sodium, potassium  
and cerium

INVENTOR: BREL, S S; SHUBIN, M I

PATENT-ASSIGNEE: MINSK CONS MAT RES[MICSR]

PRIORITY-DATA: 1986SU-3999607 (January 2, 1986)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES MAIN-IPC		
<u>SU 1423548 A</u>	September 15, 1988	N/A
004 N/A		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
SU 1423548A	N/A	1986SU-3999607
January 2, 1986		

INT-CL (IPC): C04B041/86

ABSTRACTED-PUB-NO: SU 1423548A

BASIC-ABSTRACT:

The engobe contains (in wt. %): glass cullet 85.5-90 and bentonite 10-14.5.

The glass cullet contains (in wt. %): SiO<sub>2</sub> 70.92-74.6, TiO<sub>2</sub> 0.75-0.9, CaO 6.26-8.4, Na<sub>2</sub>O 15.2-16.28, K<sub>2</sub>O 2.33-2.5 and CeO<sub>2</sub> 0.8-1. Bentonite contains (in wt. %): SiO<sub>2</sub> 67.55, Al<sub>2</sub>O<sub>3</sub> 12.37, Fe<sub>2</sub>O<sub>3</sub> 1.53, TiO<sub>2</sub> 0.15, CaO 4.12, MgO 2.37, SO<sub>3</sub> 0.25, Na<sub>2</sub>O 0.62, K<sub>2</sub>O 1.09 and calcination loss 9.95.

The mixt. is sprayed on the article, dried for 48 hrs. at 80 deg.

C. and  
fired for 2 hrs. at 1020 deg. C. to yield a white, 50-500 microns  
layer  
withstanding 170 freezing cycles, of strength 2.6-3.2 MPa, absorbing  
0-0.2%  
water.

USE/ADVANTAGE - In building materials industry. Frost resistance of  
the engobe  
is increased from 18-30 to 170 cycles, adhesion to fired brick from  
0.5-0.9 to  
2.6-3.3 MPa, and water absorption reduced from 2.6-5.8 to 0-0.2%.  
Bul.34/15.9.88.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: ENGOBE CERAMIC DECORATE BRICK MANUFACTURE CONTAIN ENRICH  
BENTONITE

GLASS CULLET CONTAIN OXIDE SILICON TITANIUM CALCIUM  
SODIUM  
POTASSIUM CERIUM

DERWENT-CLASS: L01

CPI-CODES: L01-A01B; L01-A03C; L01-A05; L02-B06; L02-D14C;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1989-040882